

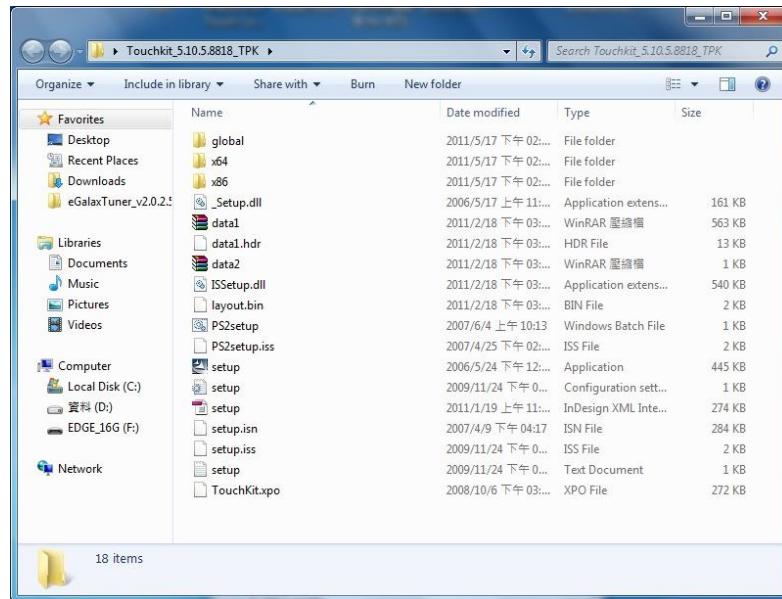
**TouchKit Software
User manual
for Windows 7
Version: 5.10.5**

CONTENT

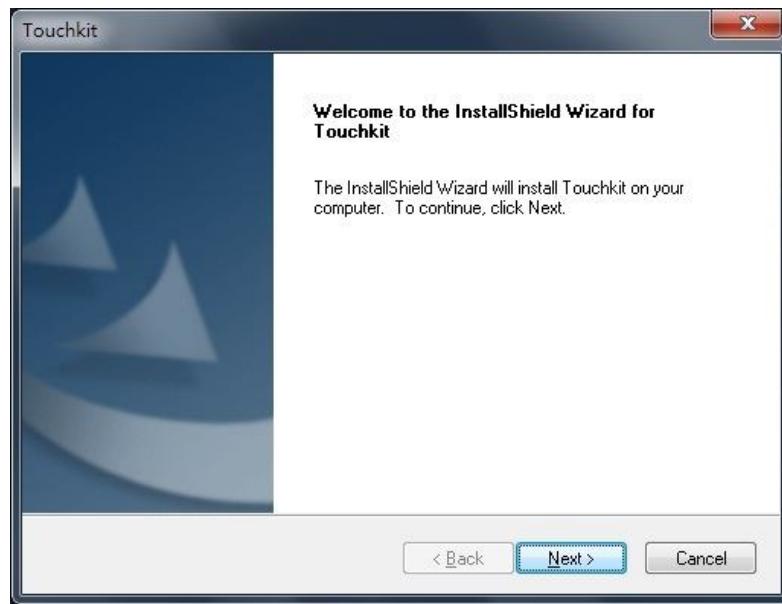
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Chapter 1. Installing TouchKit

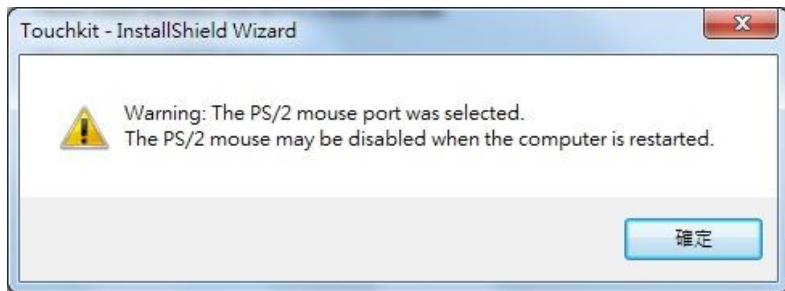
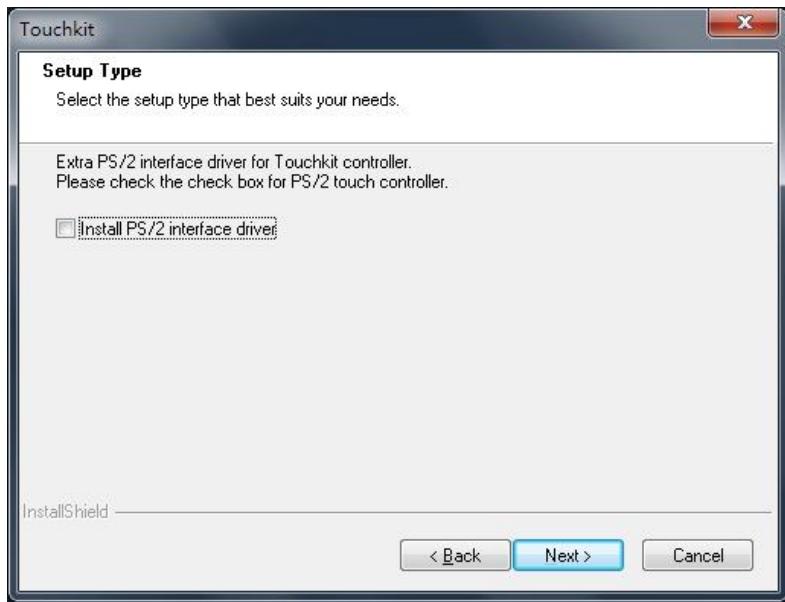
Touchkit driver software installation package contains files as below



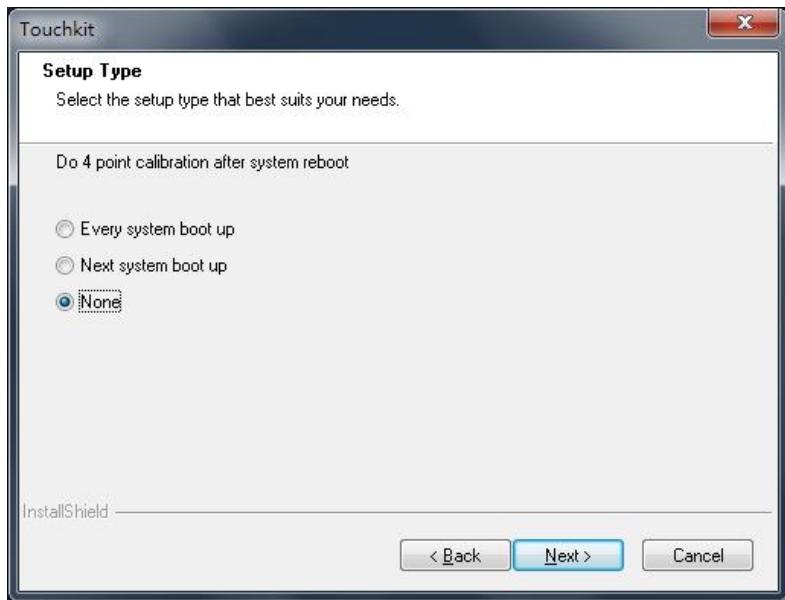
Double click at the **setup.exe**, then windows starts to run the installation program.



Press **Next** button to continue installation, then, a new dialog popped up as below



This dialog shows to ask user if the PS2 filter driver for touch screen to be installed. User can check this check box for PS2 filter driver installation. The standard PS2 mice can still work well after this filter driver installed because Touchkit PS2 filter driver can work with both standard PS2 mice and PS2 touchscreen. But, this filter driver may does not work with other devices with the PS2 mouse port. After check or uncheck this check box, press **Next** button to continue installation. Then, it shows new dialog as below,

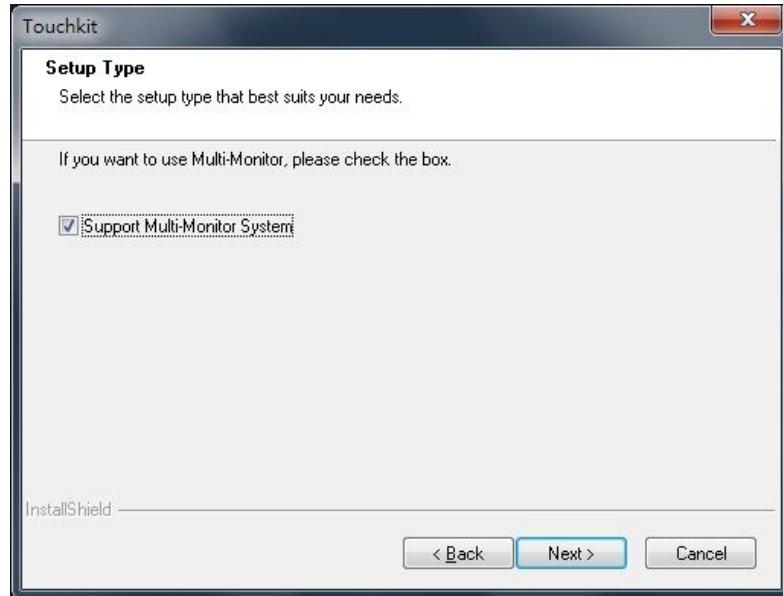


Also, Touchkit software provides user with a fast 4 points calibration. If the system needs 4 points calibration to make sure the touch accuracy every system reboot, user can check this check box. The 4 points calibration window will be popped up for calibration whenever system boot up if this check box was checked during driver software installation.

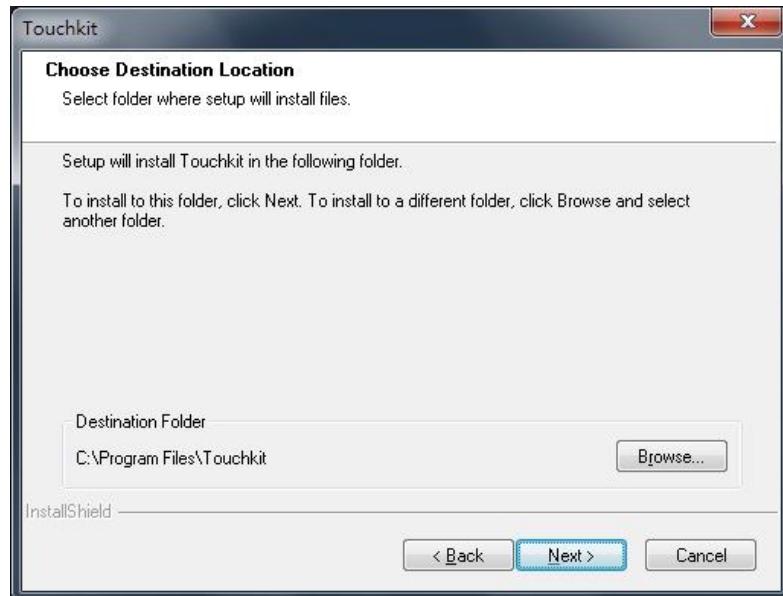
Press **Next** button to continue installation. The setup program prompts a message box to hint user to make sure that the Touchkit USB controller devices were well connected with system USB ports to guarantee the USB touchkit device drivers updated after driver installation. Then, just press **OK** to continue,



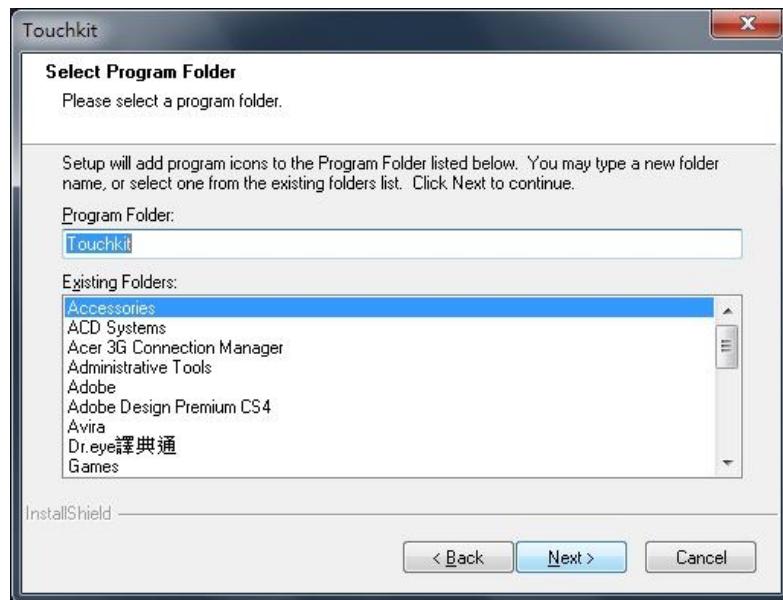
Touchkit driver package supports multiple monitor operation. If your application is for multiple monitors system, please check the check box to support multiple monitors. So that, the a multiple monitor setting property page will be shown in Touchkit utility. Then, press **Next** to continue.



A pop up window for user to choose the target path the files will be copied to. Then, Press **Next** to continue.



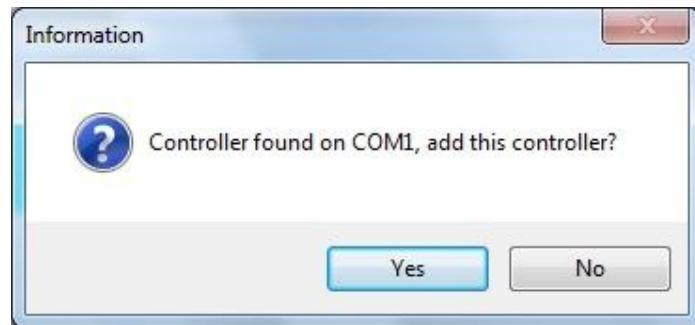
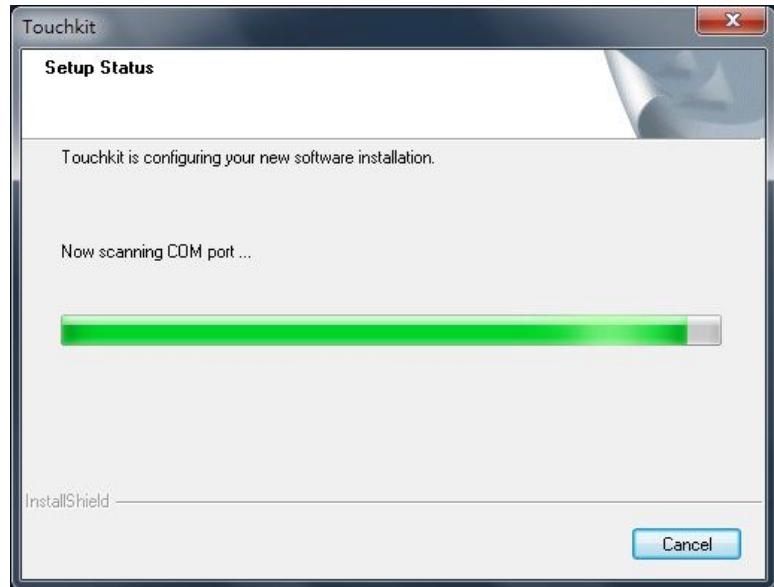
A dialog popped up for user to assign the target program folder. Press **Next** to continue.



Press **Next** to continue installation.

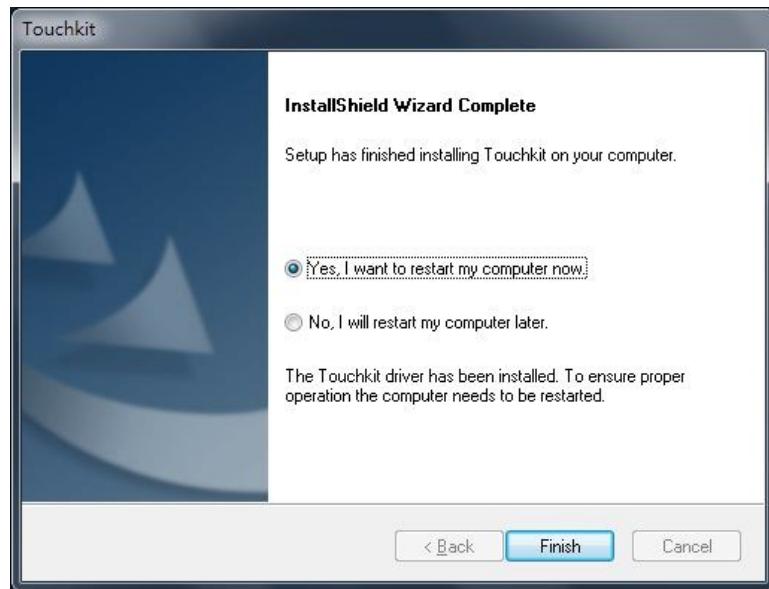


The setup program will scan system **COM** ports to detect if any Touchkit serial device was connected. If yes, it also pops up a message box for user to make sure if setup program install driver for this new found device

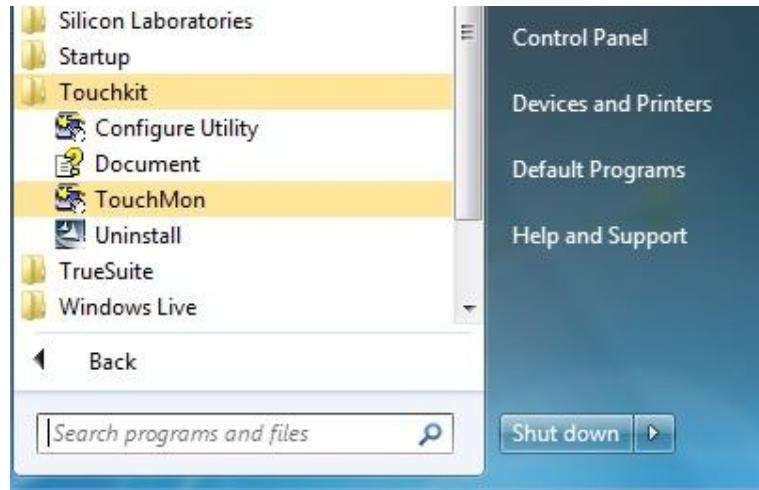


Just Press **Yes** or **No** to confirm driver installation for this new found device

Finally, if **PS2** filter driver was installed during this software installation, a reboot dialog is popped up for system **reboot** request to complete driver installation.



After driver installation, a shortcut will be generated and shown on the desktop. And, a new file group generated for Touchkit as below,

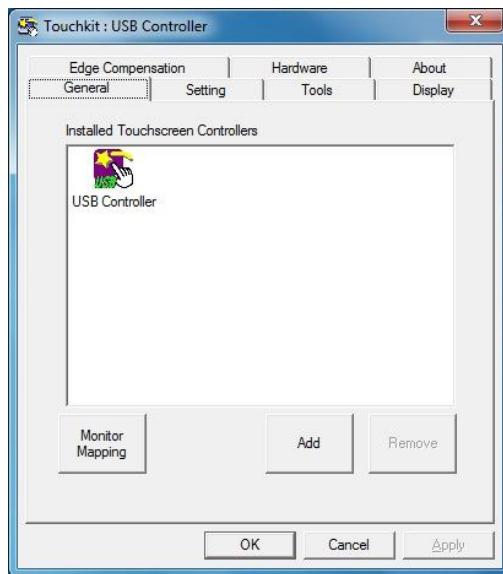


Chapter 2. Using TouchKit utility

There are seven property pages in TouchKit utility, and they are **General**, **Setting**, **Tools**, **Display**, **Edge Compensation**, **Hardware** and **About**. Each property page contains different functions for users to do the adjustments. Therefore, users can easily manage all the TouchKit controllers through TouchKit Utility.

2.1 General Property Page

The general property page in Touchkit utility shows all of Touchkit touchscreen controllers installed as below



In addition, there are 3 function push buttons in this property page.

Add

The function button is used for serial RS232 controllers only. Press this button to search the Touchkit serial controllers connected with the system COM ports. Whenever it finds a new Touchkit serial controller, a new serial controller icon object will be shown in the controller list window automatically.

USB Touchkit device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the system USB port. And, the icon object for the USB controller will

disappear automatically as soon as the device was removed from the system USB port.

Touchkit PS2 driver support PS2 mice and Touchkit touchscreen controller. It can works with both PS2 mice and Touchkit touchscreen PS2 controller. After the Touchkit PS2 driver was installed, this utility assumes the PS2 touchscreen controller exists and is always shown in the controller list window.

Remove

This function button is used for serial RS232 controllers only. This button will be greyed and disabled automatically when the selected controller in the controller list window is not RS232 type. Press to remove and uninstall the selected serial RS232 controller from the system. Then, this serial RS232 icon object in controller list window disappears automatically.

USB Touchkit device supports plug and play, the icon object for USB controller will be shown in the controller list window automatically when the USB controller is connected with the system USB port. And, the icon object for the USB controller will disappear automatically as soon as the device was removed from the system USB port.

Touchkit utility does not allow user to remove/uninstall the PS2 device driver dynamically. To uninstall the Touchkit PS2 driver, user needs to go to Windows Device Manager to do un-installation. In addition, after PS2 un-installation, it needs to system reboot to complete un-installation.

Monitor Mapping

Touchkit driver utility supports multiple monitor and display system. This function will help user to do monitor mapping. a new window will be popped-up on a monitor as below. Please touch the touchscreen panel to do mapping. In addition , please do calibration after finish monitor mapping.

1

>>> Please touch here <<<

Press ESC to quit.

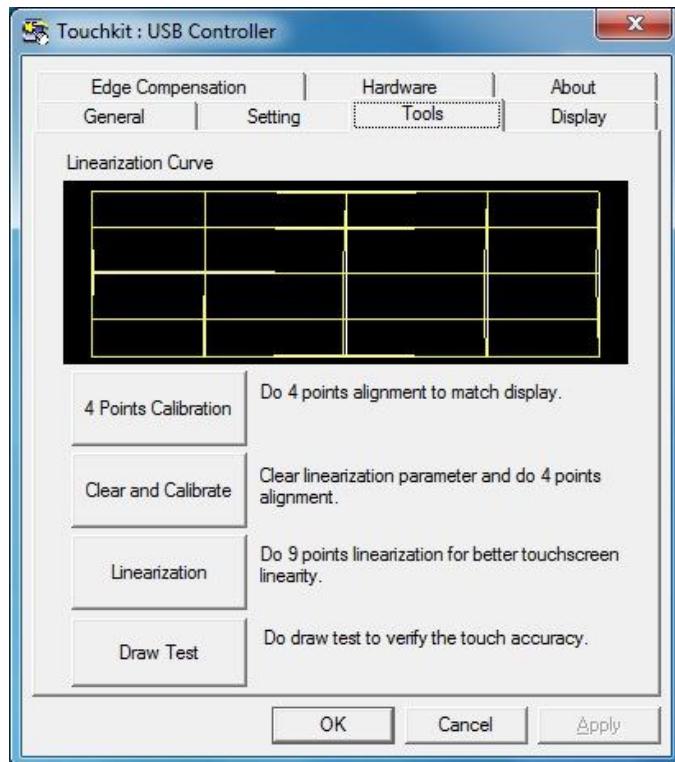
Press SPACE bar to skip to Next Screen.



Auto skip to next screen...

2.2 Tool Property Page

Calibration, draw test tools and the linearity curve of the touchscreen were listed in this property page shown as below for user to do touchscreen calibration and touch position test.



User can do calibration or draw test by pressing the function push buttons.

Linearization Curve

Linearization curve of the touchscreen is list in this page for reference and trouble shooting purpose.

4 points calibration

It needs calibration before the touchscreen can work accurately. Whenever the user feel the accuracy lost, user can do calibration again to get a more accuracy touch function.

Pressing this button, a new window will be popped-up at the location when the touchscreen was mapped to area for this touch system to guide the user do 4 points calibration.



User should follows the guide to touch and hold the blinking symbol in the calibration window until it shows “OK” to make sure that the utility can gather enough data for computation.

Clear and Calibrate

Press this button to erase the 25 points calibration/linearization parameters and force user to do 4 points calibration again. After 25 points calibration data was clear, the 4 points calibration data will be invalid. It needs to do 4 points calibration.

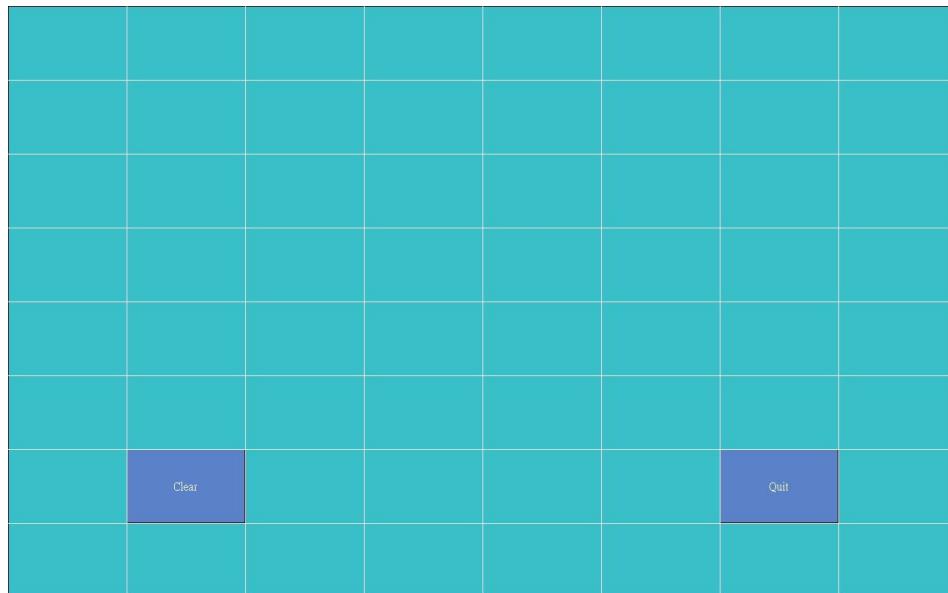
Linearization

Linearization (25or9 points calibration) function is used to compensate the touchscreen linearity. After linearization completed, the linearity of the touchscreen will be shown in the Linearity curve window.

Pressing this button, a new window will be popped-up at the location when the touchscreen was mapped to area for this touch system to guide the user do 25 points calibration. User should follows the guide to touch and hold the blinking symbol in the calibration window until it shows “OK” to make sure that the utility can gather enough data for computation.

Draw Test

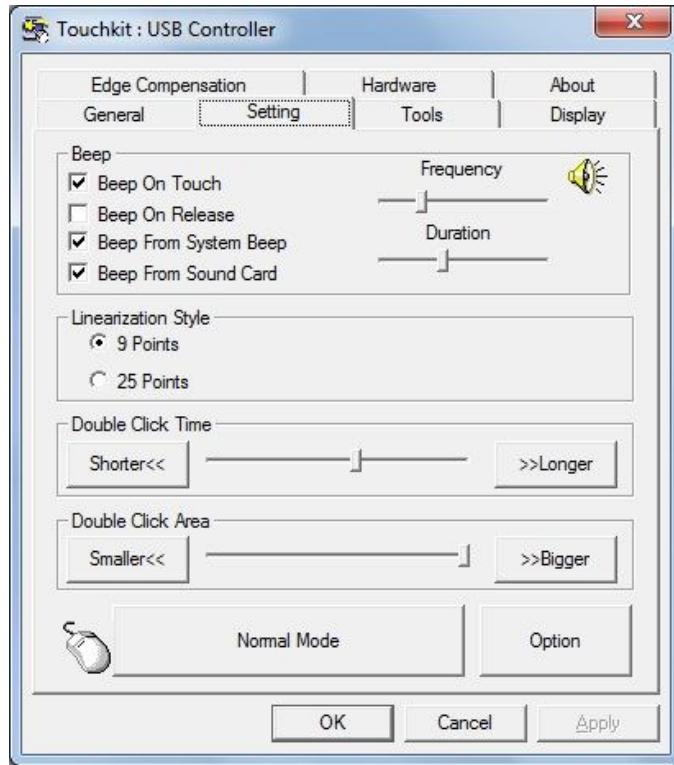
This function is used for accuracy and performance check. Press this button and a new pop up window will be popped up in the location where the touchscreen was mapped to the touch system as below,



User can press the **Clear** button to clear the window. Press **Quit** button to terminate this draw test.

2.3 Setting Property Page

The Setting property page can be shown in TouchKit Utility as below,



Function buttons and check boxes described as below

Beep

1.) Beep On Touch

Check this check box to enable driver to generate a beep sound when touch touchscreen state is switched from untouched to touched state.

2.) Beep On Release

Check this check box to enable driver to generate a beep sound when touchecreen state is switched from touched state to untouched state.

3.) Beep From System Beep

Check this check box to make the beep from system speaker.

4.) Beep From Sound Card

Check this check box to make the beep from sound card.

5.) Frequency

Adjust this frequency to control the beep sound frequency generated by the driver.

6.) Duration

Adjust this duration to control the beep sound duration.

Linearization Style

Touchkit utility provides user with both 9 points and 25 points calibration for linearization. User can select the suitable kind of linearization type.

Double Click Time

The **Double Click Time** group is used to set system double click time. Change this value will affects the double click behavior for all of the mice devices in the system. Two continuous clicks at the same area within this specified time period will be recognized as a double click event.

Double Click Area

The double click area group is used to set the system double click area. Change this value will affects the double click behavior for all of the mice devices in the system. Twice continuous click with this specified area in the specified double click time will be recognized as a double click event.

Mouse Emulation mode

There are 5 mouse emulation modes for TouchKit touchscreen controllers. Press on the button to change the emulation mode,

1.) Normal Mode

Normal mode behaves mouse button down and mouse move. User can select this mode to select object, and dragging the object.

2.) Click On Touch

With this Click On Touch mode, the driver emulates a mouse click event when the touchscreen state was switched from un-touched state to touched state. Then, the driver always generate mouse move event and is tracking the touch position until the touchscreen state switched to un-touch state.

3.) Click On Release

With this Click On Release mode, the driver emulates a mouse click event when the touchscreen state was switched from touched state to un-touched state.

4.) Click On Touch without moving cursor

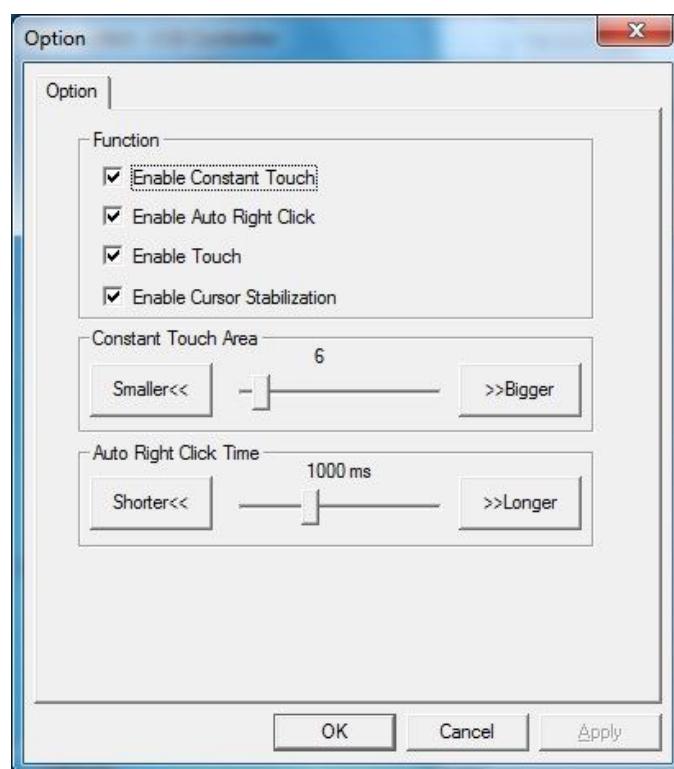
With this mode, the driver behaves similar as Click On Touch mode. The cursor does not move to the touch position except the first touch point.

5.) Click On Release without moving cursor

With this mode, the driver behaves similar as Click On Release mode. The cursor does not move to the touch position except the lift-off point.

Option

User can set configuration for some advanced functions with this option button. Press this button, a pop up property sheet window will be popped up and shown as below.



1.) Enable Constant Touch (Hold)

Constant Touch is the function to check if the most recent touched position is same as the previous touched point. If the point difference is smaller than the defined area, the driver does not generate any mouse event to reduce system loading. Check this check box to enable this function (Hold) and un-check it to disable this function.

2.) Enable Auto Right Click

If the touchscreen was kept touched for a specified time, the driver will generate a mouse right button click event if this function was enabled. Check the check box to enable this function and uncheck it to disable this function.

3.) Enable Touch

The driver read the data input from controller to generate mouse event. However, it can be enabled or disabled to generate the mouse event.

Check this check box to make driver to generate the mouse event when it receives the touch point input from Touchkit touchscreen control and un-check it to stop driver generating the mouse event.

4.) Enable cursor stabilization

A software filter was implemented inside the driver to filter some noise to stabilize and smooth the touch points. Then, the user can see a more stable cursor. Check this check box to enable this software filter and un-check it to disable this function.

5.) Constant Touch Area (Hold area)

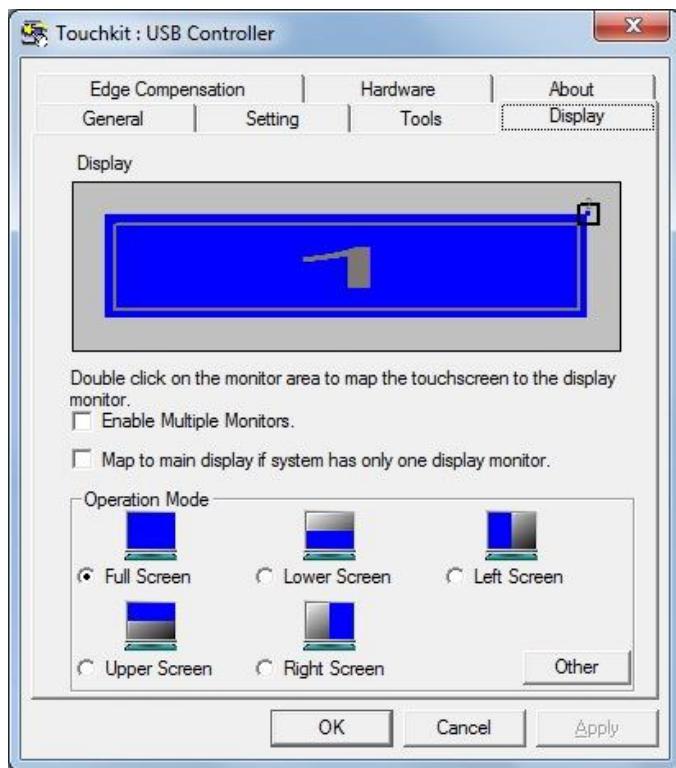
Adjust the parameter for Constant Touch (Hold) function. This is a criterion to judge if the most recent touched point is same as the previous touched point. If the point difference is within this area, it will be recognized as the same touch point and the driver does not generate new mouse event for this new touch point.

6.) Auto Right Click Time

Adjust the Right click time for auto right click function. If the touchscreen was touched and hold for this period of time, the driver generates a mouse right click event.

2.4 Display Property Page

Touchkit utility supports multiple monitor and display system. To work with multiple monitor system, user needs to do proper configuration to map the touchscreen working area to the correct system display area. User can do such configuration with this property page shown as below



Display

The system monitor display geometry was shown in the Monitors window in this page to show the locations of all of the monitors of the system.

User can follow below instructions to do the configuration.

Enable multiple monitor

Check this check box to enable multiple monitor support and uncheck it to disable multiple monitor support. When this function is disabled, the touchscreen will be mapped to the primary monitor automatically. When this function is enabled, user can double click on the monitor area in the monitor geometry window to assign the monitor area where the touchscreen will be mapped. In other word, the touchscreen will work with the selected monitor. Then, the selected monitor area rectangle line will be changed to be white and the other monitor rectangles line will be grey.

Map to main monitor when the system has only one monitor

When the multiple monitor function was enabled, and the system has only one monitor. Driver allows user to generate the mouse event for the primary monitor or not when the touchscreens which were not mapped to primary monitor. Check the check box to enable this function, then, the driver will generate the mouse event for the primary monitor even through the touchscreen was configured as other monitor mapping and multiple monitor function enabled.

Operation Mode

Touchkit driver support split display mode for those applications which do not map the touchscreen to the full screen of the monitor.

1.) Full screen

The touchscreen will be mapped to the full screen of the specified monitor.

2.) Right screen

The touchscreen will be mapped to the right half screen of the specified monitor.

3.) Left screen

The touchscreen will be mapped to the left half screen of the specified monitor.

4.) Upper screen

The touchscreen will be mapped to the upper half screen of the specified monitor.

5.) Lower screen

The touchscreen will be mapped to the lower half screen of the specified monitor.

6.) Other operation mode

6-1.) Quarter 1

The touchscreen will be mapped to the first quarter area of the specified monitor display.

6-2.) Quarter 2

The touchscreen will be mapped to the 2nd quarter area of the specified monitor display.

6-3.) Quarter 3

The touchscreen will be mapped to the 3rd quarter area of the specified monitor display.

6-4.) Quarter 4

The touchscreen will be mapped to the 4th quarter area of the specified monitor display.

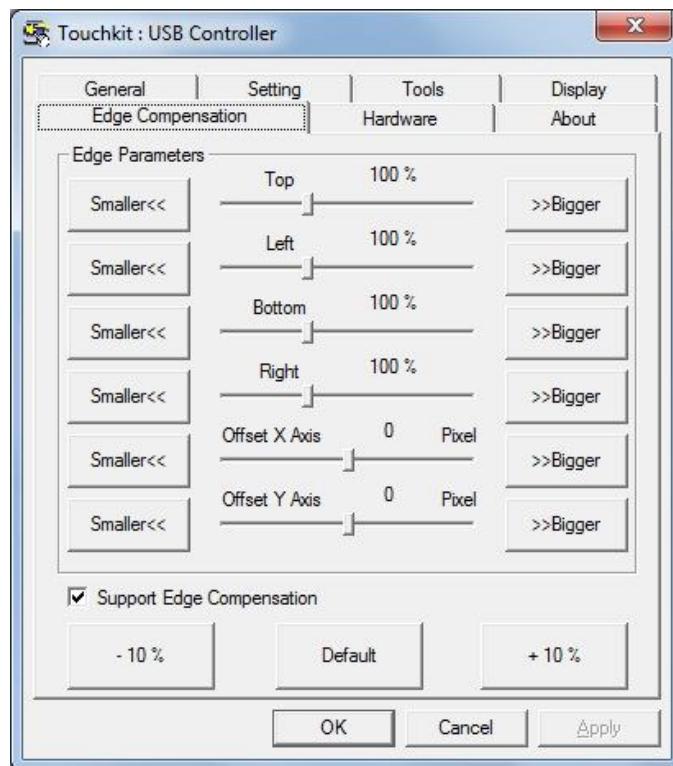
6-5.) Customized

If the touchscreen needs to be mapped the area other than the above area, user can define the mapping area for application. **With this mode, the driver does not**

correct the mapping area when the display resolution changed. It needs to do configuration setting again whenever the display resolution changed.

2.5 Edge Compensation Property Page

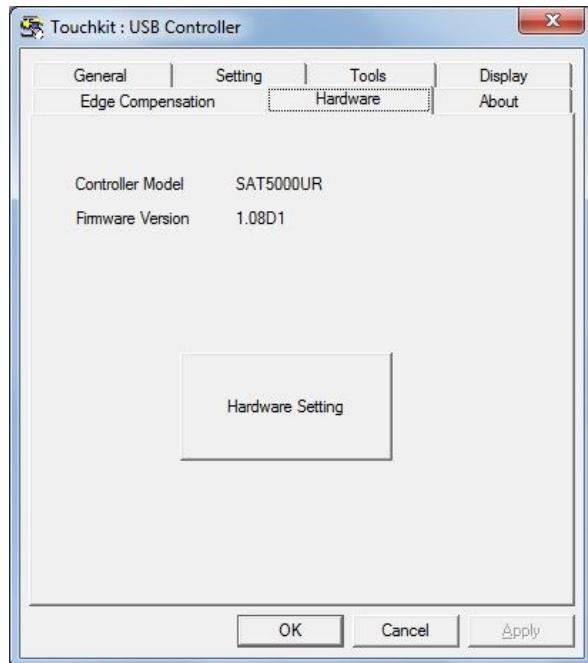
For some special touchscreen which can not reach to the edge area of the full screen, Touchkit utility provides user with edge compensation tool to solve such problem and make it easy to touch the edge area without accuracy lost. Stretch a little bit near the edge area.



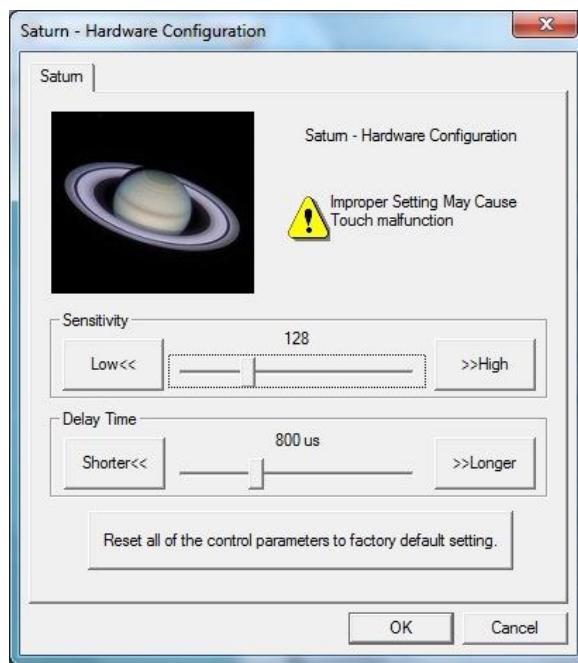
User can set the stretch percentage for the 4 edges. In addition, it allows user to set an offset for the touch point for special application.

2.6 Hardware Property Page

This hardware property page shows the model and firmware version of the touchkit touchscreen controller. The software will query the hardware information from controller and show the information as below.

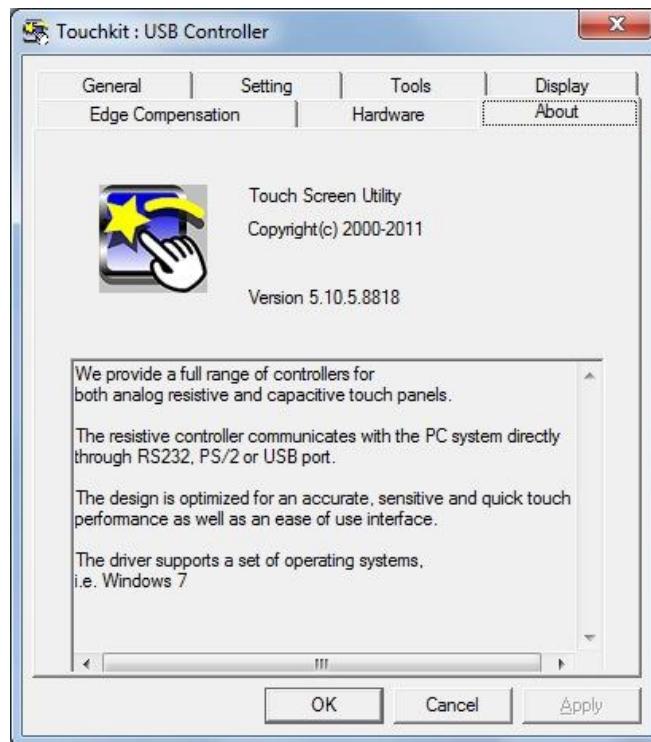


User can adjust sensitivity and delay time according to TP feature and user habit.



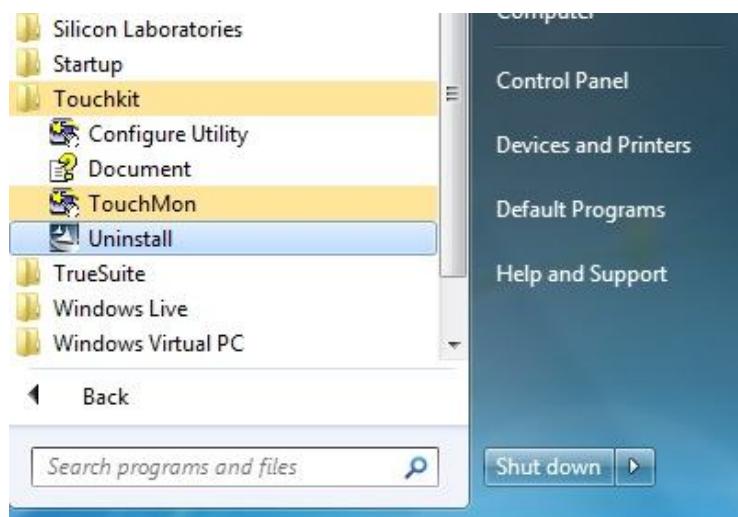
2.7 About Property Page

“About” shows some information for Touchkit driver information.

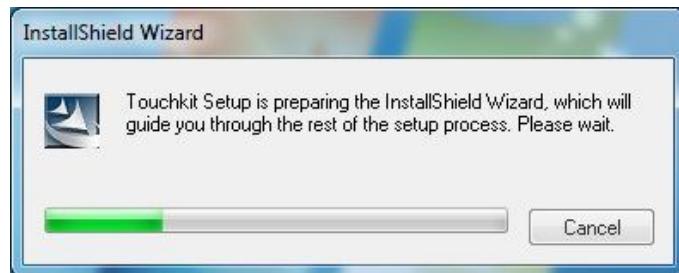


Chapter 3. Uninstalling TouchKit

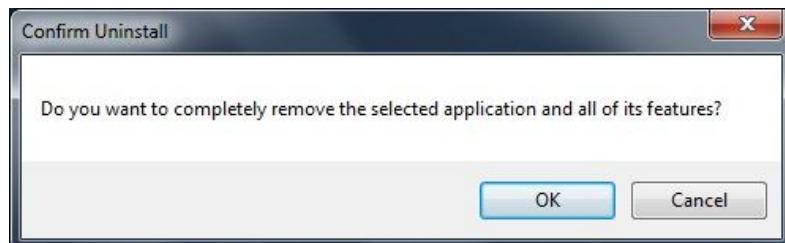
Go to **Start / All Programs / TouchKit / Uninstall**, and execute it.



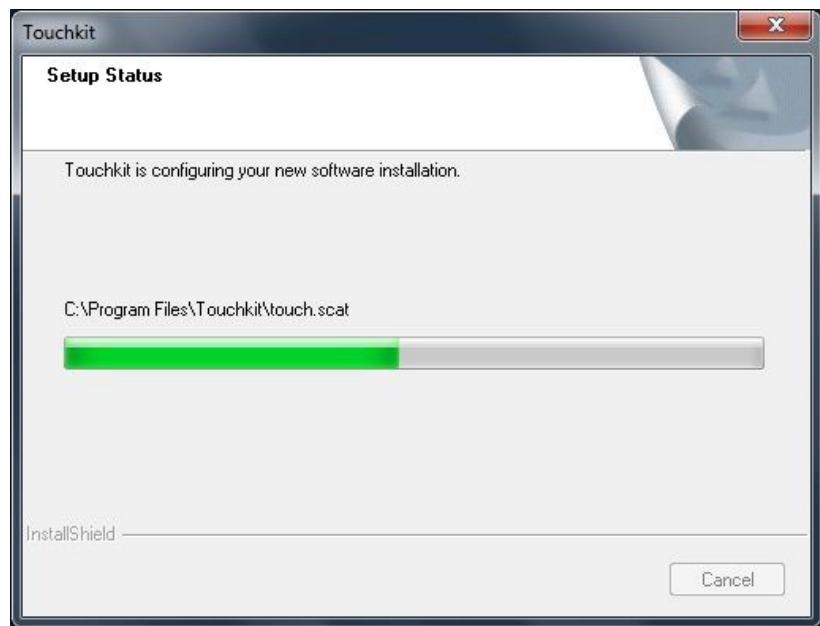
TouchKit setup dialog appears, and prepares to uninstall.



Confirm dialog, press **OK** to start un-installation, **Cancel** to cancel un-installation.



Start to uninstall **TouchKit**.



TouchKit will not be removed until system reboot. Press **Yes** to reboot immediately or **No** to reboot later.

